Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

1.　(Currently Amended) A method, comprising:

~~substantially~~ simultaneously reading original values from a plurality of registers;

~~parsing a particular instruction~~

determining results of a dependency-producing instruction; ~~and~~

determining a select number of registers to be modified in the plurality of registers based on the dependency-producing instruction;

modifying a subset of the values in the select number of registers with architecturally correct values comprised of the results of the dependency-producing instruction; and

~~substantially~~ simultaneously writing the original values and the architecturally correct values to the plurality of registers.

2.　(Original) The method of claim 1, further comprising:

providing a means by which an entire set of values may be collectively read or collectively written by instructions that operate on the entire set of values.

3. (Currently Amended) The method of claim 2, wherein said ~~substantially~~ simultaneously reading includes reading values from a plurality of predicate registers.

4. (Currently Amended) The method of claim 1, wherein said ~~substantially~~ simultaneously reading includes reading values from a plurality of Not-a-Thing (NaT) registers.

5. (Original) The method of claim 1, wherein said parsing a particular instruction includes parsing an Itanium instruction.

6. (Original) The method of claim 5, wherein the Itanium instruction selects one register to be modified.

7. (Original) The method of claim 5, wherein the Itanium instruction selects two registers to be modified.

8. (Original) The method of claim 5, wherein the Itanium instruction selects 48 registers to be modified.

9. (Original) The method of claim 5, wherein the Itanium instruction selects up to 63 registers to be modified.

10. (Currently Amended) The method of claim 1, wherein said ~~substantially~~ simultaneously writing includes writing the values to a plurality of predicate registers.

11.   (Original) The method of claim 10, wherein the plurality of predicate registers includes all 63 predicate registers.

12-22. (Cancelled)

23.   (Currently Amended) A computer readable medium containing executable instructions which, when executed in a processing system, causes the system to perform a read-modify-write operation, comprising:

substantially simultaneously reading original values from a plurality of registers;

parsing a particular instruction

determining results of a dependency-producing instruction; , and

determining a select number of registers to be modified in the plurality of registers based on the dependency-producing instruction;

modifying a subset of the values in the select number of registers with architecturally correct values comprised of the results of the dependency-producing instruction; and

substantially simultaneously writing the original values and the architecturally correct values to the plurality of registers.

24.   (Currently Amended) The medium of claim 23, wherein said substantially simultaneously reading includes reading values from a plurality of predicate registers.

25.   (Original) The medium of claim 23, further comprising:

providing a means by which an entire set of values may be collectively read or collectively written by instructions that operate on the entire set of values.

26-29. (Cancelled)